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| 10/622,985 | 07/18/2003 | Alexey S. Kabalnov | 200209338-1 | 3061 |
| 22879 | 7590 02/23/2005 | | EXAMI | INER |
| | PACKARD COMPANY 400, 3404 E. HARMONY | KLEMANSKI, | KLEMANSKI, HELENE G | |
| INTELLECTUAL PROPERTY ADMINISTRATION | | | ART UNIT | PAPER NUMBER |
| FORT COLL | NS, CO 80527-2400 | | 1755 | |
| | | | DATE MAILED: 02/23/2005 | 5 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | |
|--|--|--|--|--|
| Office Action Summary | | | | |
| | | 10/622,985 | KABALNOV ET AL. | |
| | | Examiner | Art Unit | |
| | The MAU INC DATE of this communication | Helene Klemanski | 1755 | |
| Period f | The MAILING DATE of this communication or Reply | appears on the cover sneet w | in the correspondence address | |
| THE - Extended after aft | MORTENED STATUTORY PERIOD FOR REMAILING DATE OF THIS COMMUNICATION IN THE PROVISIONS OF THE COMMUNICATION IN THE PROVISIONS OF THE PROVISI | ON. R 1.136(a). In no event, however, may a note. a reply within the statutory minimum of thire arised will apply and will expire SIX (6) MON tatute, cause the application to become Al | reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133). | |
| Status | | | | |
| 1) | Responsive to communication(s) filed on _ | · | | |
| 2a)□ | | This action is non-final. | | |
| 3)□ | Since this application is in condition for allo | owance except for formal mat | ters, prosecution as to the merits is | |
| | closed in accordance with the practice und | ler <i>Ex parte Quayl</i> e, 1935 C.D | D. 11, 453 O.G. 213. | |
| Disposit | ion of Claims | | | |
| 4)⊠ | Claim(s) 1-23 is/are pending in the applica | tion. | | |
| _ | 4a) Of the above claim(s) is/are with | drawn from consideration. | | |
| · | Claim(s) is/are allowed. | | | |
| | Claim(s) <u>1-23</u> is/are rejected. | | | |
| 7)∐ | Claim(s) is/are objected to. | ad/ar alagtian rassuiram ant | | |
| 8)[_ | Claim(s) are subject to restriction ar | na/or election requirement. | | |
| Applicat | ion Papers | | | |
| 9)[| The specification is objected to by the Exar | miner. | | |
| 10) | The drawing(s) filed on is/are: a) | accepted or b) ☐ objected to | by the Examiner. | |
| | Applicant may not request that any objection to | | | |
| 44) | Replacement drawing sheet(s) including the co | · | | |
| 11)[_] | The oath or declaration is objected to by the | e Examiner. Note the attache | d Office Action or form P1O-152. | |
| Priority | under 35 U.S.C. § 119 | | | |
| | Acknowledgment is made of a claim for fore All b) Some * c) None of: | eign priority under 35 U.S.C. | § 119(a)-(d) or (f). | |
| | 1. Certified copies of the priority docum | nents have been received. | | |
| | 2. Certified copies of the priority docum | nents have been received in A | application No | |
| | 3. Copies of the certified copies of the | • | received in this National Stage | |
| | application from the International Bu | reau (PCT Rule 17 2(a)) | | |
| | See the attached detailed Office action for a | ` ' ' ' | | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 7/18/03&12/17/04.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

6) Other: ____.

5) Notice of Informal Patent Application (PTO-152)

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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements filed July 18, 2003 and December 17, 2004 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Applicants should note that the examiner's copy of the application does not contain any of the foreign references cited in both of the above information disclosure statements. The examiner will consider these references if they are filed in response to this Office Action.

Claim Objections

Claims 4, 5, 16 and 17 are objected to because of the following informalities: in claim 4, last line, the phrase "and where in R_1 is C; R_2 and R_3 are CN; R_5 is SO_3 ; and R_4 and R_6 are H" should be deleted since there are no substituents R_1 - R_6 present in the formula; in claim 5, last line, the phrase "and where in R_1 is N; R_2 is H; R_3 is COOH; R_4 is SO_3 ; R_5 is H and R_6 is SO_3 " should be deleted since there are no substituents R_1 - R_6 present in the formula; in claim 16, last line, the phrase "and where in R_1 is C; R_2 and R_3 are CN; R_5 is SO_3 ; and R_4 and R_6 are H" should be deleted since there are no substituents R_1 - R_6 present in the formula and in claim 17, last line, the phrase "and

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where in R_1 is N; R_2 is H; R_3 is COOH; R_4 is SO₃; R_5 is H and R_6 is SO3" should be deleted since there are no substituents R_1 - R_6 present in the formula. Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-4, 6-16 and 18-23 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 5, 9-12, 16, 17, 22, 26, 30-33, 37 and 38 of copending Application No. 10/623,001 (US 2005/0011406). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1-3, 5-15 and 17-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Wright et al. (US 2004/0020405).

Wright et al. teach a composition comprising (1) 1-99 parts by weight of one or more of a metal chelate compound of the formula

$$\begin{bmatrix} A \\ B \\ (SO_3H)_n \end{bmatrix}_M$$

wherein one of A and B is OH and the other is an azotriazole group of the formula

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wherein Z is H, -CN, -SO₃H, CO₂H or –SO₂NR²R³, Y is H, -CN, -SO₃H, CO₂H or – SO₂NR²R³ and R² and R³ are H; M is a metal such as nickel and n is 0-4 and (2) 99-1 parts by weight of one or more water-soluble magenta dye other than the metal chelate compound such as Acid Red 52 or Acid Red 289 (i.e. rhodamine dye). The composition may contain a single metal chelate compound of the above formula or a mixture thereof. The composition may further contain a single water-soluble magenta dye or a mixture of two or more water-soluble magenta dyes. Wright et al. further teach an ink composition comprising 1-10 parts by weight of the above composition and a liquid medium wherein the liquid medium comprises a mixture of 30-97 parts by weight water and 2-60 parts by weight of a water-soluble organic solvent. See paras. 0004-0014, paras. 0024-0030, para. 0037, para. 0045, paras. 0060-0065, paras. 0068-0071, paras. 0073-0074, paras. 0077-0083, paras. 0100-0103, examples 1, 7, 9 and 13, Tables I and II and claims 1-8 and 11-14. The composition and the ink composition as taught by Wright et al. appear to anticipate the present claims.

7. Claims 1, 6, 7, 9-13, 18, 19 and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Wuzik et al. (US 2004/0074018).

Wuzik et al. (US 2004/0074018) teach a magenta dye mixture consisting essentially of C.I. Acid Red 52 of the formula

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wherein M is H or a monovalent cation (i.e. xanthene or rhodamine dye) and a compound of the formula (1)

$$N = N$$
 SO_2M
 SO_3M
 SO_3M

wherein Y is H, C_1 - C_6 alkyl or C_1 - C_6 alkoxy, R^1 is OM, CH= CH_2 , $CH_2CH_2OR^2$, $CH_2CH_2NR^3R^4$, $CH_2CH_2SR^5$ or $CH_2CH_2CR^6R^7R^8$, R^2 is H, SO_3M or C_1 - C_6 alkyl, R^3 and R^4 are H, C_1 - C_6 alkyl, C_1 - C_6 acyl, C_6 - C_{10} aryl or halogen substituted C_6 - C_{10} aryl, R^5 is C_1 - C_6 alkyl, C_1 - C_6 acyl, C_6 - C_{10} aryl or halogen substituted C_6 - C_{10} aryl, R^6 , R^7 and R^8 are H or C_1 - C_6 alkyl, M is H or a monovalent cation and M1 is Cu, Ni, Cr or Fe (i.e. metalized azo dye), in a weight ratio of 1:100 to 100:1. Wuzik et al. (US 2004/0074018) further teach an ink jet ink composition comprising 0.1-50% by weight of the above magenta

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dye mixture, 0-20% by weight of a shading dye such as Acid Red 289, 0-99% by weight water and 0.5-99.5% by weight of an organic solvent or humectant. The amount of the Acid Red 52 in the ink composition is generally less than the amount of the metalized azo dye (see examples 6-8). See paras. 0009-0034, para. 0051, paras. 0055-0056, paras. 0058-0060, examples 6-8 and claims 1-4, 7-9 and 11-15. The magenta dye mixture and the ink jet ink containing the dye mixture as taught by Wuzik et al. appear to anticipate the present claims.

8. Claims 1, 6-13 and 18-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang et al.

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Wang et al. teach a magenta ink jet in composition comprising 0.1-5% by weight of a rhodamine dye of the formula

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wherein R1-R4 are H or hydrocarbon groups that may be substituted with ionic groups (i.e. sulfonate groups); X⁻ is a suitable counterion; Y is H or an ionic group such as a sulfonate or carboxy group and Z is H or an ionic group such as a sulfonate or carboxy group such as Acid Red 52, Acid red 289 and Acid Red 388, 0.2-5% by weight of a metallized azo dye of the formula

wherein M is Na⁺, K⁺, Li⁺ or NH₄⁺ such as Reactive Red 23 and pacified Reactive Red 23, 5-49% by weight of an organic solvent and/or humectant and 51-90% by weight

water. The ratio of the rhodamine dye to the metallized dye can be from about 1:10 to 10:1. The rhodamine dye component may also be a mixture of Acid Red 52 and Acid Red 289 (i.e. shading dye) and the metallized azo dye compound may be a mixture of Reactive Red 23 and pacified Reactive Red 23. See col. 2, line 52 - col. 3, line 24, col. 5, lines 1-55, col. 6, lines 1-45, col. 7, lines 30-40, col. 8, lines 10-61, col. 9, lines 10-50, examples 1-3; formulations #1B, #1C, #2B, #2C, #3B and #3C and claims 1-3. The magenta ink jet in composition as taught by Wang et al. appears to anticipate the present claims.

9. Claims 1, 6, 7, 9-13, 18, 19 and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Menzel et al.

Menzel et al. ('067) teach a magenta dye mixture consisting essentially of C.I. Acid Red 289 of the formula

$$\begin{array}{c} CH_3 \\ SO_3 \\ SO$$

wherein M is H or a monovalent cation (i.e. xanthene dye) and a compound of the formula (2)

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wherein X is SO_2R^1 , Y is H, alkyl or alkoxy, R^1 is OH, $CH=CH_2$, $CH_2CH_2OR^2$, $CH_2CH_2NR^3R^4$ or $CH_2CH_2SR^5$, R^2 is H, SO_3M or C_1 - C_6 alkyl, R^3 and R^4 are H, C_1 - C_6 alkyl, C_1 - C_6 acyl, C_6 - C_{10} aryl or halogen substituted C_6 - C_{10} aryl, R^5 is C_1 - C_6 alkyl, C_1 - C_6 acyl, C_6 - C_{10} aryl or halogen substituted C_6 - C_{10} aryl, M is H or a monovalent cation and M1 is Cu, Ni, Cr or Fe (i.e. metalized azo dye), in a weight ratio of 1:100 to 100:1. Menzel et al. ('067) further teach an ink jet ink composition comprising 0.1-50% by weight of the above magenta dye mixture, 0-20% by weight of a shading dye such as Acid Red 52, 0-99% by weight water and 0.5-99.5% by weight of an organic solvent or humectant. The amount of the Acid Red 289 in the ink composition is generally less than the amount of the metalized azo dye (see examples 3-5). See col. 2, line 22 – col. 3, line 30, col. 4, lines 21-51, col. 5, lines 4-30, examples 3-5 and claims 1-6, 10-15 and 18. The magenta dye mixture and the ink jet ink containing the magenta dye mixture as taught by Menzel et al. ('067) appears to anticipate the present claims.

Claim Rejections - 35 USC § 103

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10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1, 6, 7, 9-13, 18, 19 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmer et al.

Zimmer et al. teach a dye set comprising a magenta dye set comprising a xanthene dye (i.e. rhodamine dye) such as Acid Red 52, Acid Red 289 or mixtures thereof and a metallized azo dye of the formula

wherein M¹ is Cu, Ni, Fe or Cr and M is H, Na, Li, K or an ammonium ion such as Reactive Red 23 in a weight ratio of xanthene dye to metalized azo dye of from about 1:10 to 1:1. Zimmer et al. further teach a magenta ink jet ink composition comprising from about 0-2% by weight of a xanthene dye (i.e. rhodamine dye) such as Acid Red 52, Acid Red 289 or mixtures thereof and 2-4% by weight of a metalized azo dye of the formula

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$$O-M^{\sharp}$$
 $O-M^{\sharp}$
 $O-M^$

wherein M¹ is Cu, Ni, Fe or Cr and M is H, Na, Li, K or an ammonium ion such as Reactive Red 23 in a weight ratio of xanthene dye to metalized azo dye of from about 1:10 to 1:1 and an ink vehicle wherein the ink vehicle comprises 25-99.9% by weight water, a water-soluble organic solvent and optionally a surfactant. See col. 1, line 60 – col. 2, line 26, col. 2, line 65 – col. 3, line 33, col. 3, line 64 – col. 4, line 27, col. 6, lines 24-62, col. 11, lines 34-45, col. 12, lines 44-49, col. 13, lines 8-53, examples 1-3 and claims 1, 3, 5-8, 13 and 15-19. Zimmer et al. fails to specifically exemplify the use of a nickel-containing metallized azo dye as claimed by applicants.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific nickel-containing metallized azo dye as claimed by applicants as Zimmer et al. also discloses the use of these nickel-containing metallized azo dyes but fail to show an example incorporating them.

Conclusion

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The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Helene Kle*l*manski Primarv Examiner

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February 22, 2005